

Appendix B: Terminal Buildings

Terminal buildings provide a connection between airside and landside operations and, within the buildings, a variety of services is offered to users and visitors. The Virginia Department of Aviation participates in the planning, design, construction, and certain maintenance activities for terminal buildings. The state's participation is based on the amount of public-use space provided inside a terminal building.

B.1 Public-Use Space

Common-use public areas that are directly related to the movement of passengers and baggage in air carrier terminal buildings are eligible for state funding. Non-revenue producing areas and joint-use space in terminal buildings are eligible for state funding.

Public-use space is defined as terminal building space that:

- is used for public benefit and convenience
- does not produce revenue for the sponsor or any other public or private entity

Incidental use of public space for advertising public events, posting public notices, or housing vending machines for public convenience is permissive in public-use spaces. The costs associated with adapting a building to provide for these incidental uses are not eligible for state funding.

Private-use space is defined as terminal building space that:

- is used to produce revenue
- is used for administrative activities

A sponsor may lease space for any public or private activity if the use does not interfere with aeronautical activities and complies with *Virginia Aviation Regulations* 24-VAC-10 seq., state grant assurances, and federal grant assurances as applicable. Sponsors should follow the *Virginia Public Procurement Act* when leasing terminal building space.

If a sponsor converts public-use space into private-use or revenue producing space during the commitment term specified in a grant agreement, the sponsor must reimburse the state for its share of the cost to build that space. That amount will be prorated based on the number of months remaining in the commitment term of the grant agreement. If private-use space is converted to public-use space, DOAV will not reimburse a sponsor for the change in space usage.

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Public-Use Space	Private-Use Space
<ul style="list-style-type: none"> • lobbies • flight planning areas • pilot lounges • 400 square feet of conference room • public restrooms • baggage claim delivery areas • associated automated baggage handling equipment • public-use corridors to boarding areas • loading bridges • passenger vehicles moving between or within terminal facilities exclusively within airside areas • central waiting areas • holding areas for air freight loading and unloading 	<ul style="list-style-type: none"> • cleaning and laundry areas • public lockers and showers • pilot sleep rooms • restaurants • sponsor and management offices • fixed base operations • aircraft maintenance areas • rental car services • entertainment areas such as game rooms • communication equipment, such as telephones and fax machines, in business and related centers

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46 **B.1.1 Joint-Use Space**

47 Some areas and equipment serve both public-use and private spaces. These
48 include:

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- 50 • circulation areas including vestibule areas
- 51 • storage areas for janitorial equipment used for accommodating public health
52 and safety
- 53 • mechanical areas for heating, air conditioning, ventilation, and utility systems

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55 State participation in these joint-use spaces will be prorated based upon the ratio of
56 eligible DOAV funded public-use space to total building space minus the joint-use
57 space.

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59 **B.1.2 Conference Room Space**

60 State funding may be used in the construction of a maximum of 400 square feet of
61 conference room space within a terminal when the conference room space will be
62 used for meetings with industrial and business prospects and meetings related to
63 airport business. This space may also be made available on an expense-defraying
64 basis for meetings and conferences for groups or companies. The utilization of
65 conference rooms for economic development efforts and activities should have
66 priority over other uses.

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68 **B.1.3 Federal Inspection Facilities**

69 The construction or improvement of federal inspection facilities, including baggage
70 handling equipment, is eligible for state funding. Administrative office space and
71 special purpose equipment are not eligible. Sponsors may not charge for the use of
72 this space or related equipment.

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Example: Determining a Public-Use Funding Ratio and Square Footage

A new terminal building will have the following square footage:

- 5,000 total square footage
- 2,500 public-use space square footage
- 1,500 private-use space square footage
- 1,000 joint-use space square footage

To determine the public-use funding ratio for this terminal:

Step 1: Figure the terminal space that is not joint-use space:

total square footage – joint-use space square footage

$$5,000 - 1,000 = 4,000$$

Step 2: Figure the ratio of public-use space square footage to total square footage to determine the DOAV eligible percentage:

public-use space square footage ÷ total square footage

$$2,500 \div 4,000 = 0.625 \text{ or } 62.5 \text{ percent}$$

Step 3: Figure the portion of the joint-use space square footage that is considered as public-use space:

public-use ratio x joint-use space square footage

$$0.625 \times 1,000 = 625$$

Step 4: Calculate the total square footage eligible for DOAV funding:

public-use space square footage + public-use share of joint-use space square footage

$$2,500 + 625 = 3,125$$

Step 5: Calculate the percentage of eligible for DOAV funding:

total square footage eligible for DOAV funding ÷ total square footage

$$3,125 \div 5,000 = 0.625 \text{ or } 62.5 \text{ percent}$$

B.1.4 Accessibility Features

Fixed terminal facilities and equipment, including boarding devices required by 49 CFR 27, that provide access for people with disabilities are eligible if:

- they are a part of the design of a new terminal or renovation
- they are required by federal or state law

B.2 Terminal Building Conceptual Studies

Terminal building conceptual studies approved by DOAV are required for all airports, except local service airports, before design can begin for a new structure, a replacement structure, or an expansion of an existing structure. These studies need to include:

- detailed project description
- justification for the proposed project
- conceptual analysis
- geometric design
- justification for requested deviations from standards
- construction cost analysis
- project schedule
- project cost
- project budget

For reliever, regional, and community service general aviation airports, the studies must provide an analysis of the public and non-public use space based on DOAV's 20-year funding eligibility model to determine maximum funding eligibility. A final determination made by such a study is the ratio of eligible DOAV funded space to total building space. DOAV will provide the model calculation to a sponsor upon request. Federal Aviation Administration guidelines for terminal buildings should be used for air carrier airports.

DOAV will fund one terminal building conceptual study project that follows through to design and construction. DOAV will not participate in the cost for any changes to a previously approved study that has not resulted in a construction project.

B.3 Terminal Buildings for Local Service Airports

For local service airports, eligible terminal design and construction are limited to a maximum of 1,236 square feet of public-use, non-revenue producing space, with the state share limited to 90 percent of the total eligible project costs.

A maximum square footage for local service airports has been determined for specific uses as follows:

Space Usage	Maximum Square Footage
passenger and pilot lobby	400
flight planning area	100
restrooms – men's	144
restrooms – women's	144
vending area	100
mechanical rooms	100
storage	100
circulation	148

If any dedicated space usage listed above is excluded from a terminal, the associated square footage is deducted from eligible state participation, and it may not be applied to another space usage. The usage listed above is recommended but not required.

B.4 Terminal Building Design and Construction

Terminal development for the purpose of accommodating passengers and cargo activities is eligible for state funding. The development can be a new structure, a replacement structure, or an expansion of an existing structure. The state's participation rate towards the cost of the design and construction of public-use, non-revenue producing areas is up to 100 percent, not to exceed 90 percent of the total project cost. The eligible costs include building design; building site preparation; and the extension of utilities for water, sewer, power, and communications to the building. A terminal building site is considered to be the area of a terminal building's foundation plus a nominal space five feet outside the perimeter of the building's foundation.

Approved terminal building conceptual studies are required for all airports, except those with a local service role, before design work can begin. DOAV has the authority to approve or reject any design, construction method, and materials proposed for a terminal. **All costs for a terminal building that exceed criteria approved by the department will be borne by the sponsor.**

As terminal projects usually involve eligible and ineligible items, the state's participation is prorated for eligible items. When prorating on a square footage basis, construction costs and costs for eligible items are prorated on the ratio of eligible square footage to the total usable square footage of the structure.

B.5 Terminal Area Site Preparation

The area designated for improvements related to a terminal building, such as aircraft parking and auto parking, that is outside of the five-foot perimeter around a terminal building is considered to be the terminal area. Terminal area site preparation is eligible for state funding at a participation rate of 80 percent.

DOAV reserves the right to limit the number of auto parking spaces which will receive state funding participation, based on the public-use space in a terminal building. On average the state funds 13.5 parking spaces per 1,000 square feet of public-use space.

B.6 Terminal Building Operation and Maintenance

By accepting state funding for a terminal building, a sponsor undertakes responsibility for the operation and maintenance of the terminal building. Sponsors are responsible for all operational costs and are expected to keep terminal buildings open during the hours published in the most current edition of FAA's Airport/Facility Directory.

If the repair of a terminal building or the repair/replacement of a terminal building system involves insurable property, sponsors should refer to 3.4 Utilization of Insurance Resources.

B.6.1 Terminal Building Maintenance

The state's participation in the maintenance of a terminal building is based on the original public-use space ratio used for the construction of the building. If the amount of public-use space within a terminal building has changed, the public-use space ratio will be recalculated for the project evaluation process. If the maintenance will affect only public-use space, the state's participation rate will be 80 percent. If the maintenance will affect only private-use space, the state will not participate in the project. Terminal building maintenance will be funded through the Maintenance Program.

Eligible maintenance activities include, but are not limited to, exterior and interior painting; repairs to plumbing systems, electrical systems, and roofs; window replacement; and lighting repairs. Ineligible activities include, but are not limited to, janitorial services, wallpapering, window treatments, lamp replacement, and exterior power washing.

B.6.2 Terminal Building Renovation

Renovations to a terminal building are architectural or cosmetic changes made within the existing footprint of the building. These changes may include new carpeting, lighting, wall treatments, furniture, sound proofing, interior structural change, and features to improve access under the Americans with Disabilities Act (ADA).

The state's participation in the renovation of an entire terminal building is based on the original public-use space ratio used for the construction of the building. If the

amount of public-use space within a terminal building has changed or the renovation will alter the amount of public-use space, the public-use space ratio will be recalculated for the project evaluation process. If the renovation will affect only public-use space, the state's participation rate is 90 percent of the total eligible cost of the project. If the renovation will affect only private-use space, the state will not participate in the project. Terminal building renovations will be funded through the Airport Capital Program.

When a project request is for the renovation of a terminal building, DOAV must first inspect the current condition of the building to determine necessary improvements. Based on the scope of the project, a terminal building conceptual study addressing the renovation may be required. DOAV will review and approve plans and specifications.

B.6.3 Terminal Building System and Equipment Replacement

Terminal building systems and equipment eligible for replacement include, but are not limited to, carpeting, flooring, HVAC, ceiling tiles, roof bladders, elevators, escalators, lighting, flight information display systems, or public address systems.

The state's participation in the replacement of a terminal building system or equipment serving the entire building is based on the original public-use space ratio used for the construction of the building. If the amount of public-use space within a terminal building has changed or the replacement of a terminal building system will alter the amount of public-use space, the public-use space ratio will be recalculated for the project evaluation process. If the system or equipment serves only public-use space, the state's participation rate is 100 percent of the total eligible cost of the project. If the system or equipment serves only private-use space, the state will not participate in the project. Terminal building system and equipment replacements will be funded under the Maintenance Program, and if those funds are not available, the project may be funded under the Airport Capital Program.

When a project request is for the replacement of a terminal building system, DOAV may request a detailed professional analysis of the current system or will physically inspect the site to determine eligible improvements. DOAV will review and approve plans and specifications.

B.6.4 Terminal Building Expansion

An expansion of a terminal building will create a change in the existing footprint of the building. A terminal building conceptual study will be required for an expansion.

The state's participation in the expansion of a terminal building is based on the public-use space ratio of the expanded space only. Terminal building expansions will be funded through the Airport Capital Program. DOAV will review and approve plans and specifications.

When a sponsor wishes to undertake a project that involves the simultaneous renovation and expansion of a terminal building, a terminal building conceptual study will be required. This study must include the estimated cost of the renovation and the

estimated cost of the expansion as separate cost figures. The square footage of each portion of the project must also be included. During the bid process, the actual cost of the renovation and the actual cost of the expansion must be provided as separate cost figures.

B.7 General Aviation Terminal Building Security Systems

Security systems for new and existing general aviation terminal buildings will be funded through the Voluntary Security Program at the participation rate of 90 percent. A sponsor shall coordinate the inclusion of security systems in the design of a new terminal building at the earliest phase possible. Security systems for existing terminal buildings should be included in airport security plans to be eligible for funding.

B.8 Terminal Building Furniture

The purchase of original furnishings for the public-use portions of terminal buildings is eligible with the state's participation rate at 100 percent. This usually includes seating for waiting areas, conference rooms, and pilot lounges. Replacement furnishings for public-use areas are eligible with the state's participation rate at 50 percent of the eligible cost. The department reserves the right to disapprove the purchase of furniture based on the number of pieces of furniture, style, and material requested.

Ineligible furniture items include but are not limited to:

- trash cans
- window treatments
- artwork
- plants
- business and communications equipment
 - telephones
 - fax machines
- entertainment amenities
 - stereos
 - CD players
 - radios
 - televisions
 - display cabinets
- outside furniture
 - benches
 - rocking chairs
 - lounge chairs
 - stackable non-permanent chairs

B.9 Emergency Medical Equipment

Automatic external defibrillator (AED) devices are eligible for funding based on local codes and reasonable and necessary requirements as determined by DOAV. The state's funding participation is 80 percent.

B.10 Terminal Buildings for Multimodal Service

Multimodal terminal buildings offer mobility for passengers and baggage between two or more modes of transportation that are operating on a scheduled basis under a franchise or similar authority granted by a federal, state, or local agency. These buildings are supported by connecting route networks that extend beyond the local service area. State funds may be used to develop a multimodal, public-use terminal located within the boundaries of an airport, and this usage is subject to the prerequisites and cost participation of regular terminal buildings. Only the portions of the building directly related to aviation use are eligible.